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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Sandrine Decoster

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

ARNOLD, ERNST V

ART UNIT

PAPER NUMBER

1616

NOTIFICATION DATE

DELIVERY MODE

03/03/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/606,786	Applicant(s) DECOSTER ET AL.	
	Examiner ERNST V. ARNOLD	Art Unit 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 44-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/13/07 has been entered.

The restriction requirement filed on 6/28/06 remains in force. Claims 1-46 are pending and claims 44-46 have been withdrawn. Claims 1-43 are under examination as they read upon the elected subject matter.

Withdrawn rejections:

Applicant's amendments and arguments filed 12/13/07 are acknowledged and have been fully considered. Any rejection and/or objection not specifically addressed below is herein withdrawn.

Terminal Disclaimer

The terminal disclaimer filed on 10/09/07 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of copending application 10/608,264 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8, 10 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Vacher et al. (US 6,231,877).

Vacher et al. disclose cosmetic compositions comprising a liquid fatty alcohol, 2 to 5 % cetyl alcohol, and 1 to 5 % quaternium 80, a cationic silicone, in a cosmetic medium (water) (Abstract and claim 13). Vacher et al. did not disclose if the composition was transparent or not but since the ingredients are the same as instantly claimed then transparency is an inherent feature of the composition in the absence of evidence to the contrary thus anticipating instant claims 1-5, 7, 8, 10 and 11. The composition comprises water which makes it a solution/dispersion/suspension of the quaternium 80 and reads on instant claim 6.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 10-14, 17-20, 28-31 and 34-43 are rejected under 35 U.S.C. 102(b) as being anticipated by Janchitraponvej et al. (US 5,556,615).

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Janchitraponvej et al. disclose a composition comprising a cationic silicone and a liquid fatty alcohol that is transparent and reads on instant claim 1 reproduced below for applicant's benefit (Examiner added emphasis).

<u>EXAMPLE 5</u>		15
Ingredient	weight percent	
Silicone Compound ⁵⁾	1.00	
Amidamine ⁸⁾	1.00	
Lactic Acid ⁴⁾	0.44	20
Hexylene Glycol	10.00	
Propylene Glycol	4.00	
Cyclomethicone ⁹⁾	1.00	
Quaternary Ammonium Compound ⁶⁾	1.50	
Protein-based Conditioner ⁷⁾	0.80	
Coupling Surfactant ³⁾	1.75	25
Nonionic Surfactant ²⁾	0.80	
Thickener ¹⁰⁾	1.15	
Fragrance	0.30	
Preservative ¹¹⁾	0.25	
Dye	q.s.	
Water	q.s. to 100%	30

⁵⁾Silicone SF1173, G.E. Silicones, Waterford, NY, added as a 100% active material;

⁶⁾ADAGEN 432ET, Sherex Chemical Co., Dublin, OH, added as a 75% by weight active material (dicyrildimonium chloride);

⁷⁾MACKPRO WLW, The McIntyre Group, University Park, IL, added as a 40% by weight active material (quaternized wheat protein);

⁸⁾SURFADONE LP300, ISP Chemical Co., Wayne, NJ, added as a 100% active material (N-laurylpyrrolidone);

⁹⁾BRL 98, ICI Americas, Wilmington, DE, added as a 100% by weight active material (polyoxyethylene (20) oleyl ether);

¹⁰⁾KATHON CG Rohm and Haas Co., Philadelphia, PA and 0.20% 40

Glydant, Lanza, Inc., Fairlawn, NJ.

¹¹⁾Percentages are active weight percent of each ingredient present in the composition;

¹⁾SHQUAT Q-50, available from Siltech, Inc., Norcross, GA, added as a 70% active product in isopropyl alcohol;

³⁾LEXAMINE L-13, lauramidopropylidimethylamine, available from Inolex Corp., Philadelphia, PA. as a 100% active product; and

⁴⁾Added as an 88% aqueous solution to neutralize the amidamine and adjust the pH.

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Silquat Q-50 is a silicone polymer with a quaternary nitrogen and polyoxyethylene oleyl ether is an ethoxylated fatty alcohol (See column 10, line 1 through column 11, line 35; column 14, lines 58-64 and column 15, lines 15-40).

Janchitraponvej et al. disclose that compositions made with Abil quat 3272 (another name for quaternium 80) for silquat q-50 were also clear. (column 15, lines 45-47). Thus, Janchitraponvej et al. have reduced to practice a clear composition of Quaternium 80 and a liquid fatty alcohol anticipating instant claims 1-7, 10 and 11. The additional cationic surfactant above is the dicetyldimonium chloride and reads on instant claims 12-14 and 17. The quaternized wheat protein reads on an additional cationic polymer and anticipates instant claims 18-20 and 28. The composition above comprises 1.15% thickener which is hydroxyethylcellulose and reads on instant claims 29-31, 34 and 35. The composition above has an additional silicone, cyclomethicone which can serve as a conditioner, as well as additional surfactant (N-laurylpyrrolidone) and additional protein based conditioners thus anticipating instant claims 36-38. The presence of water, fragrance and glycol in the hair conditioning composition anticipate instant claims 39-43. It is the Examiner's position that the intended use as a rinse out shampoo is inherent in the composition of Janchitraponvej et al. With respect to the art rejection above, it is noted that the reference does not teach that the composition can be used in the manner instantly claimed, shampoo etc..., however, the intended use of the claimed composition does not patentably distinguish the composition, per se, since such undisclosed use is inherent in the reference composition. In order to be limiting, the intended use must create a structural difference between the claimed composition

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and the prior art composition. In the instant case, the intended use does not create a structural difference, thus the intended use is not limiting.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Janchitraonvej et al. (US 5,556,615) in view of Jacquet et al. (US 4,390,522), Dupuis (US 6,214,326) and Vatter et al. (US 6,224,888) and Monick (J. Am. Oil Chemists Soc 1979, 56, 853A-860A).

Applicant claims a transparent composition comprising in a cosmetically acceptable medium at least one silicone with quaternary ammonium groups and at least one liquid fatty alcohol.

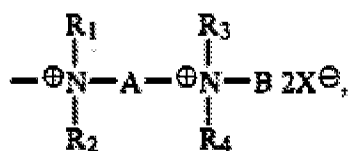
Determination of the scope and content of the prior art

(MPEP 2141.01)

Janchitraponvej et al. is discussed above and that discussion is hereby incorporated by reference. Janchitraponvej et al. teach hair conditioning compositions for treating hair comprising a 0.1% to 5% silicone compound such a Quaternium 80, and provide an example with a silicone compound, quaternary ammonium compound (a cationic surfactant), nonionic surfactant, alkylene glycols, 1.15% thickener (hydroxyethylcellulose), cyclomethicone (additional conditioner), protein-based conditioner, coupling surfactant, fragrance and water as shown above (Abstract; column 15, example 5 and claims 1, 8 and 9). Janchitraponvej et al. teach quaternary ammonium compounds for inclusion in the composition (Column 12, lines 25-59) and nonionic surfactants such as polyoxyethylene (20) oleyl ether and N-alkylated-2-pyrrolidones (Column 13, lines 46-67). **Please note for the record that polyoxyethylene (20) oleyl ether is of the formula $C_{18}H_{35}(OCH_2CH_2)_nOH$ and reads on liquid fatty alcohols.** Janchitraponvej et al. teach that an oil-soluble water dispersible quaternary ammonium compound either alone or in combination with a water-soluble quaternary ammonium compound can be used in the composition (Column 12, lines 40-44). Janchitraponvej et al. teach the addition of an optional nonionic thickener such as hydroxypropylcellulose, guar gum, and gum Arabic, for example, at 0% to about 3% by weight (Column 14, lines 1-10). Janchitraponvej et al. teach that the hair is rinsed with water after contacting with the conditioning composition (Claims 14 and 15).

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Jacquet et al. teach the addition of 0-25 weight percent of a fatty alcohol such as oleyl, lauryl, myristyl, cetyl, stearyl, and isostearyl alcohols to diquatarnary ammonium cationic polymer cosmetic compositions for application to the hair (Claims 1, 11 and 12). Shown below is the diquatarnary ammonium cationic polymer, which can be present from 0.1% to 5% in shampoos (Column 8, lines 45-48).



Jacquet et al. teach emulsifiers such as oleyl alcohol polyoxyethylenated with 10 to 30 moles of ethylene oxide, for example (Column 7, lines 24-27). Jacquet et al. teach nonionic detergents such as ethers of polyethoxylated fatty alcohols (Column 7, lines 65-67). Jacquet et al. teach the further addition of cosmetic resins such as polyvinylpyrrolidone and copolymers of polyvinylpyrrolidone (Column 8, lines 54-61). Jacquet et al. teach cationic detergents such as long-chain quaternary ammoniums, alkylpyridinium salts, polyether fatty amines, or imidazoline derivatives (Column 7, lines 62-64). Jacquet et al. teach lauryltrimethylammonium chloride as a cationic ammonium compound which renders obvious other alkyltrimethylammonium salts present in the composition from about 5% to about 10% by weight of the composition in total (Column 12, lines 23-25 and 49). Jacquet et al. teach the addition of perfumes, dyes, thickening agents, foam stabilizing agents and softening agents (Column 8, lines 40-44).

Dupuis teaches cosmetic compositions for treating keratinous material containing cationic polymers and acrylic terpolymers (Abstract). Dupuis teaches that the thickening

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and/or gelling polymers combined with cationic polymers produces cosmetic formulations which are not pasty or greasy and which give hair good properties of softness, feel and easy disentangling (Column 1, lines 36-44). The thickening and/or gelling polymers are terpolymers with a) methacrylic acid or acrylic acid; b) methacrylates, acrylates such as methyl, ethyl and butyl acrylate, and nonionic surfactants, and c) nonionic urethane monomer (Column 1, line 59 bridging Column 2, lines 63). Dupuis teaches cationic polymers of silicone, polyamines, polyaminoamides and quaternary polyammonium types as known products (Column 3, lines 52-55). Dupuis teaches quaternized vinyl pyrrolidone dialkylaminoalkyl acrylate or methacrylate copolymers, cellulose derivatives containing quaternary ammonium groups, dimethyldiallylammonium salts of hydroxypropylcellulose, cationic polysaccharides and in particular guar gums, polymers consisting of piperazinyl units, water soluble polyaminoamides, methyldiallylamne or dimethyldiallyl-ammonium cyclopolymers, polyquaternary ammonium polymers of formula VIII found in column 10, lines 25-30, homopolymers or copolymers derived from acrylic or methacrylic acid, quaternary vinylpyrrolidone and vinyl-imidazole polymers, polyamines, methacryloyloxyethyltrimethylammonium chloride crosslinked polymers, condensates of polyamines and epichlorohydrin, and chitin derivatives, for example (Column 3, line 56 through column 12, line 20 and claims 1 and 11). Dupuis teaches that when the composition is a leave-in type it comprises one or more of quaternized or non-quaternized vinylpyrrolidone/dialkylaminoalkyl acrylate or methacrylate copolymers or

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quaternary vinylpyrrolidone or vinylimidazole polymers (Claim 12). Dupuis teaches the composition as a rinse-out or leave in hair product (Claim 18).

Vatter et al. teach conventional thickening agents including synthetic polymeric materials such as polyvinylpyrrolidone for use in cosmetic compositions (Column 9, line 60 bridging column 10, line 19).

Monick is relied upon for teaching that fatty alcohols are clear liquids (page 856A, right column).

Ascertainment of the difference between the prior art and the claims

(MPEP 2141.02)

1. Janchitraponvej et al. do not expressly teach a composition with the instantly claimed fatty alcohols in claims 8 and 9. This deficiency in Janchitraponvej et al. is cured by the teachings of Jacquet et al.

2. Janchitraponvej et al. do not expressly teach a composition with the cationic polymers of instant claims 15, 16 and 21-27. This deficiency in Janchitraponvej et al. is cured by the teachings of Dupuis and Jacquet et al.

3. Janchitraponvej et al. do not expressly teach a composition wherein the thickening agent is selected from a member of instant claim 32 or a crosslinked homopolymer of vinylpyrrolidone. This deficiency in Janchitraponvej et al. is cured by the teachings of Vatter et al., Dupuis and Jacquet et al.

Finding of prima facie obviousness

Rational and Motivation (MPEP 2142-2143)

1. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add a fatty alcohol, as suggested by Jacquet et al., to the composition of Janchitraponvej et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because: 1) Janchitraponvej et al. suggest adding polyoxyethylene (20) oleyl ether which is a fatty alcohol; and 2) Jacquet et al. teach the addition of adjuvants, such as fatty alcohols and oxyethylenated or polyglycerolated fatty alcohols, in cosmetic compositions for the hair (Column 6, lines 19-21 and column 7, lines 15-16 and 24-42). Furthermore, Monick teaches that fatty alcohols are generally clear liquids.

2. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add the quaternary amine cationic polymers of Jacquet et al. or Dupuis to the composition of Janchitraponvej et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because: "It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980). It is the Examiner's position that the polymer renders obvious the quaternary monomer.

3. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add the thickening agents taught by Dupuis, Jacquet et al. and suggested by Vatter et al. in the composition of Janchitraponvej et al. and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Dupuis teaches that the thickening and/or gelling polymers combined with cationic polymers produces cosmetic formulations which are not pasty or greasy and which give hair good properties of softness, feel and easy disentangling (Column 1, lines 36-44). Vatter et al. teach that polyvinylpyrrolidone is a conventional thickening agent and it is the Examiner's position that one of ordinary skill in the art would immediately recognize polyvinylpyrrolidone as a thickening agent and one of ordinary skill in the art has the ability to crosslink a homopolymer of polyvinylpyrrolidone.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. (*In re Opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA) 1976).

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of

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ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

Response to arguments:

Applicant asserts that there is no motivation to add liquid fatty alcohols to the clear compositions of Janchitraponvej et al. because conventional compositions containing liquid fatty alcohols were not transparent and such a combination would have been expected to result in a non-transparent composition contrary to the purpose of Janchitraponvej et al. Respectfully, the Examiner cannot agree for the following reasons. Janchitraponvej et al. disclose adding nonionic fatty alcohols to the composition as described above. Obviously Janchitraponvej et al. understood that the fatty alcohols are clear/transparent and would result in clear compositions. This position is supported by the teachings of Monick on page 856A reproduced below for Applicant's benefit:

PHYSICAL PROPERTIES

The common higher alcohols are colorless liquids or solids, depending on the number of carbon atoms.

It is reasonable to suggest that one of ordinary skill in the art would know which are clear/transparent/colorless and could be added to the clear compositions of Janchitraponvej et al. without destroying the spirit of the Janchitraponvej et al. invention.

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Again, the results in the Declaration were only differences in degree and not in kind. It remains expected to produce a shampoo rinse out composition. "Expected beneficial results are evidence of obviousness of a claimed invention, just as unexpected results are evidence of unobviousness thereof." In re Gershon, 372 F.2d 535, 538, 152 USPQ 602, 604 (CCPA 1967).

Conclusion

No claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernst V. Arnold whose telephone number is 571-272-8509. The examiner can normally be reached on M-F (6:15 am-3:45 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Ernst V Arnold/
Examiner, Art Unit 1616

Ernst Arnold
Patent Examiner
Technology Center 1600
Art Unit 1616